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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

06/16/2003

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EXAMINER

LOPEZ, CARLOS N

ART UNIT

PAPER NUMBER

1731

DATE MAILED: 06/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/874,398

Applicant(s)

BANDO, SHIGERU

Examiner

Carlos Lopez

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_                      6) ☐ Other: \_\_\_\_

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- 1) Claims 7-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 7-8 recite the limitation "the carrying-in". There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 2) Claims 1, 3-4, and 6-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Tsuchiya et al (US 5,992,180). Tsuchiya discloses a method and apparatus for bending a glass plate. Rollers 2,3, and 5 provide a transporting means for transporting the glass plate 6 from one working section (4) to another working section (11). Due to the curvature of rollers 5 bending of the glass plate occurs (Col. 5, lines 1-9) as it is transported.

As for claims 7-8 as shown in figure 1 the transporting means (rollers 2,3 and 5) carry one glass plate (1) from one section (4) into another section (11) and carry another glass plate (6) from said one section (4) to another section (11).

As for claims 3-4 and 8-9, once the glass plate is placed in the curved rollers 5, the center portion of the glass plate downwardly bends and the edge portions is upwardly bended due to the curvature of the rollers 5.

**3)** Claims 1-4, 6-10, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Kuster et al (US 5,651,805). Kuster discloses a method and apparatus for bending a glass plate. Transfer rings 13 and 28 provide a transporting means for transporting the glass plate 3 from one working section (1) to another working section (16). The glass plate is bended in bending section 5 by bending mold 7 having a bending surface with openings to create a vacuum (Col. 2 lines 52-65).

As for claims 7-8 as shown in figure 1 the transporting means (rings 13 and 28) carry one glass plate (3) from one section (1) into another bending section (5) and carry another glass plate (3') from the bending section (5) to another section (16).

As for claims 3-4 and 9, once the glass plate is placed in the curved mold 7, the center portion of the glass plate downwardly bends and the edge portions is upwardly bended due to the curvature of mold 7.

In regards to claims 10-11, the bending chamber (5) having a curved mold 7 bending the glass plate and moving up and down is deemed as the claimed transporting means. The moving curved mold vertically transports the glass plate from one section (a bottom region) to another section (an upper region) of the bending chamber 5. Additionally, the claimed working section for working the glass plate is consider the mold surface of mold 7 which includes openings for sucking the glass plate and bending the glass plate (concave or convex depending on the points of view).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 5, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuster et al (US 5,651,805). Claims 5 and 16 additionally recites that the glass plate is coated. Examiner takes official notice that coating a glass sheet are well known in the art in order to protect the glass from being scratched. At the time the invention was made it would have been obvious to one of ordinary skill in the art to have coated the glass plate in order to protect the glass from scratches.

In regards to claims 12-14, Kuster's openings encompass the recess that provides the suction vacuum.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References in PTO-892 not referenced in the above rejections have been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is (703) 605-1174. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on (703) 308-1164. The fax phone numbers


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for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

C.L  
June 10, 2003

  
STEVEN P. GRIFFIN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700